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THE STORY OF ST. VEDALIA.

BY ALBERT F. KERCHEVAL.

[Contributed July, 1890.]

Perhaps within the memory of the present generation, since the discovery of gold, few events have proved of such surpassing interest and importance to California as the discovery and introduction of the *Vedalia Cardinalis*, popularly known as the Australian lady-bird, or lady-bug, and the history of the miracle wrought by her in the extermination of the countless hosts of the terrible *Icerya purchasi*, or cottony cushion scale, may well be worthy of a place in the archives of the Historical Society of Southern California. Some time, about the year 1876, the white scale was introduced into Los Angeles on some orange trees imported from Australia by Mr. T. A. Garey, but none at that time dreamed of the baleful significance of those snowy flecks appearing here and there, and stealthily stealing from tree to tree. But the "cloud no bigger than the hand" at first, grew until it overspread the whole horticultural horizon. Then when men realized the terrible character of the scourge that was upon the land, desperate and frantic efforts were made to stay it, but without avail. Relentless in its march as the ruthless hosts of Attila, it ravaged the richest and fairest vales upon which the sun looks down, and left but ruin, desolation and despair in its path. All kinds of trees in addition to the citrus family, vineyards, shrubbery, flowers, weeds, alfalfa, everything in the shape of vegetation, was in turn being attacked by the loathsome destroyer, and settled gloom and foreboding reigned over all. During all this period numberless and costly experiments were being conducted all over the coast with sprays, mixtures and emulsions, comprising everything deadly known to chemistry and science, but no material benefit was ever derived from their use, although some check was in places for the time being, made to the onward march of the victorious *Icerya*, and oftentimes the destruction of orchards hastened considerably thereby. Treatment by the gas process proved equally ineffectual, and probably half a million of dollars would be a very conservative estimate as the cost of labor and material thus vainly expended. Many horticulturists, who had been deriving princely incomes from the citrus fruits at the rate of from five hundred to one thousand dollars per annum net per acre, found themselves suddenly deprived of the same, and no words can adequately portray the despair and hopelessness of their situation. Probably five millions of dollars would be altogether an inadequate

compensation for all the losses and damage caused by the cottony cushion scale from the time of its first appearance in Southern California to the present, and it will require many years for the trees not absolutely ruined to regain their old-time healthfulness and vigor.

It was at this juncture, in the year 1888, that it was decided to send Mr. Albert Koebele to Australia on a mission for the discovery, if possible, of some parasite or predaceous enemy of the *Icerya*, it being a theory with many that Nature always provides an antidote for every poison, and a remedy for every evil, if we but know how to avail ourselves of the beneficent provision. Much acrimonious and unseemly discussion has been indulged in as to whom belongs the merit of the suggestion, and the measures taken to render it a success, but as Mr. Koebele was under pay, and acting under instructions from the Entomological Division of the Department of Agriculture, to Prof. Riley and his subordinates undoubtedly belongs much of the credit originally of the great discovery. Although during several years preceding Mr. Koebele's arrival in Australia, the white scale had almost ceased to exist there, no one could assign the true cause, but it did not take Mr. Koebele long to make the discovery, although owing to the scarcity of the *Icerya*, and consequent scarcity of the *Vedalia*, it was with great difficulty he succeeded in obtaining and forwarding to Prof. D. W. Coquillett, of Los Angeles, two or three small colonies in December, 1888, and January, 1889. Proceeding afterward to New Zealand he discovered them there in much greater numbers, and from thence sent in the spring several larger colonies, the first being placed in the orchard of J. W. Wolfskill, Esq., on Alameda street, Los Angeles, and the later consignments colonized in the orchards of Col. Dobbins and A. B. Chapman, Esq., of San Gabriel. About the middle of April, 1889, from the first small colonies established in the orchard of Mr. Wolfskill, that gentleman, Prof. Coquillett and Mr. Alex. Craw commenced the work of distribution, and to their untiring zeal, faith, energy and public spirit, the State is greatly indebted for freeing us from the deadliest menace that ever threatened the horticultural interests of this or any other community. From the orchards of Messrs. Chapman and Dobbins also, many colonies were distributed to surrounding groves, and in June the Los Angeles County Horticultural Commission established a central propagating station at the orchard of Mr. William Niles, on Washington street, from whence hundreds of colonies were sent out all over the county, and even to distant portions of the State. Thenceforward the work of annihilation of the hosts of *Icerya* was rapid and complete. As silent, as deadly, as mysterious, as came the Angel of Death to smite the countless hosts of Sennacherib,—

“The sheen of whose spears shone like stars on the sea,
When the blue waves roll nightly on deep Gallilee,”

so silently and almost in a night, smote our beneficent angel, *St. Vedalia*, the white and ghastly hosts of terror that encompassed us round about, and they passed away and were not. Ere November's rains, naught remained to remind us of our deadly enemies save their white and filmy shrouds that may be seen to this day, fluttering in the breeze in every orchard, like flags of truce of vanquished armies that have passed away forever.

With the disappearance of the white scale, also disappeared the *Vedalia*, as that appears to be their natural and only food, and being cannibalistic in nature, the larvæ attack and devour each other with all the voracity and nonchalance of the denizens of "Darkest Africa." Yet the germs of both the *Icerya* and *Vedalia* appear to have survived during the winter in some mysterious and hidden manner, and both have reappeared during the present summer in many places, but in very limited numbers.

Recently the writer received a communication (and remittance) from Mr. Albert Jaeger, of Honolulu, Sandwich Islands, stating that the white scale had made its appearance there about one year ago, and was already causing great damage and consternation, and begging that a consignment of *Vedalia* should be immediately sent to them, which was done by last steamer. It is safe to say that never again will the pallid hosts of the *Icerya* be permitted to terrorize and devastate other lands as they once did our own, for the *Vedalia* being "fittest," will survive and conquer. Then let us, like Miriam going forth before the hosts of Israel, sing songs of triumph and thankfulness for our deliverance, and forevermore keep in holy veneration the memory of our gracious lady, *St. Vedalia*.